

We claim:

1. An actuator acting as a drive unit for an injector, especially for an accumulator injection system, comprising a piezostack disposed in a tube spring, a top plate and a bottom plate, wherein the top plate of the actuator is fixed directly to an injector housing by means of caulked areas.
2. The actuator according to Claim 1, wherein the caulked areas are disposed on the sides of the top plate.
3. The actuator according to Claim 1, wherein the caulked areas are disposed on the upper area of the top plate.
4. The actuator according to Claim 1, wherein the caulked areas are disposed radially in respect of the outer periphery of the top plate.
5. The actuator according to Claim 1, wherein the caulked areas are disposed essentially tangentially in respect of the outer periphery of the top plate.
6. The actuator according to Claim 1, wherein the caulked areas are formed from the material of the injector housing.
7. The actuator according to Claim 1, wherein the caulked areas are formed from a filler material.
8. The actuator according to Claim 1, wherein a surface structure is configured on the top plate with a suitable profile depth for caulking.
9. The actuator according to Claim 8, wherein the surface structure on the top plate is configured as partially or wholly circumferential grooves.
10. The actuator according to Claim 8, wherein the top plate is configured as a cylinder and the surface structure on the top plate is configured as an external thread.

11. The actuator according to Claim 1, wherein the connection between the top plate and the injector housing is formed by four caulked areas.
12. The actuator according to Claim 11, wherein the four caulked areas are disposed in such a way that two caulked areas lie opposite each other on the top plate in each instance.
13. The actuator according to Claim 1, wherein the top plate and/or the injector housing are made of a tempering steel.
14. The actuator according to Claim 13, wherein 42CrMo4 is used as the tempering steel.
15. The actuator according to Claim 1, wherein cutouts are provided in the injector housing, at which the caulked areas are disposed.
16. The actuator according to Claim 15, wherein the cutouts serve as anchorage points for an electric plug-type connection of the actuator.
17. The actuator according to Claim 16, wherein the electrical plug-type connection is configured as a plastic extrusion coating.

18. A method for producing an injector with an actuator, whereby the assembly of the actuator to activate the injector in an injector housing comprises the following steps:

- Pre-assembly of the actuator comprising a piezostack disposed in a tube spring, a top plate and a bottom plate,
- Positioning of the pre-assembled actuator in the injector housing by lining up the actuator, especially by lining up the bottom plate with its predefined position and
- Fixing the actuator on the injector housing by means of caulking between the top plate and the injector housing.

19. The method according to Claim 18, wherein the material of the top plate and/or the material of the injector housing and/or a filler material is used for caulking.

20. The method according to Claim 18, wherein cutouts are formed in the injector housing for caulking and these are used after caulking to anchor a plastic injected electrical plug-type connection.